

Patent

Docket No: 51952USA4B.017

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Gerald M. Benson

Group Art Unit: --

Serial No.: Continuation of Serial No. 08/887,074

filed 07/02/97

Filed: Herewith

Examiner: --

For: RETROREFLECTIVE CUBE CORNER SHEETING MOLD AND METHOD FOR
MAKING THE SAME**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail Post Office to Addressee in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on:

Date Jan. 17, 2001
Express Mail No.: **EL597084509US**Stephen C. Jensen
Signature**PRELIMINARY AMENDMENT**

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Introduction

This application is a continuation of pending U.S. Application Serial No. 08/887,074, filed July 2, 1997.

Amendment**In the Specification**

At page 10, please delete the portion beginning at line 19 with the words "Related applications ..." and continuing to the end of the paragraph at line 27, and substitute therefor:

--Related applications filed (or whose priority applications were filed) on the same date as the parent application hereof include: Cube Corner Sheeting Mold and Method of Making the Same (U.S. Application Serial No. 09/636,730); Cube Corner Sheeting Mold and Method of Making the Same (U.S. Application Serial No. 09/636,520); Retroreflective

Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 08/886,998, now U.S. Patent No. 5,981,032); Retroreflective Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 09/342,410, now U.S. Patent No. 6,120,881); Retroreflective Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 09/342,812, now U.S. Patent No. 6,114,009); Retroreflective Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 09/650,695); Retroreflective Cube Corner Sheeting, Molds Therefore, and Methods of Making the Same (U.S. Application Serial No. 09/656,671); Retroreflective Cube Corner Sheeting, Molds Therefore, and Methods of Making the Same (U.S. Application Serial No. 09/656,697); Tiled Retroreflective Sheeting Composed of Highly Canted Cube Corner Elements (U.S. Application Serial No. 08/887,389, now U.S. Patent No. 5,898,523); Dual Orientation Retroreflective Sheeting (U.S. Application Serial No. 08/887,006, now U.S. Patent No. 5,936,770).--

In the Claims

Please add the following new claims:

- 5. An article comprising an array of microcubes, such that for every plane in space there are two adjacent microcubes for which at the place of adjacency none of the face edges is parallel to that plane, and in which at least one microcube of said array is rectangular, said at least one microcube of said array being canted face-more-parallel.
6. The article of claim 5 in which at least one microcube of said array has a plane of symmetry in which lies the cube axis of said microcube, thereby increasing the entrance angularity of said array in a plane perpendicular to said plane of symmetry.
7. An article comprising an array of microcubes, such that for every plane in space there are two adjacent microcubes for which at the place of adjacency none of the face edges is parallel to that plane, in which at least one of said microcube shape is rectangular, and in which at least one face of said rectangular microcube is pentagonal.
8. An article comprising an array of microcubes in which every three by three subarray of microcubes is nonrutable, and in which at least one microcube in a said three by three subarray of microcubes is rectangular, said at least one microcube being canted face-more-parallel.

9. The article of claim 8 in which at least one microcube of said array has a plane of symmetry in which lies the cube axis with said microcube, thereby increasing the entrance angularity of said array in a plane perpendicular to said plane of symmetry.--

Remarks

Please enter the above amendments before substantive examination. The specification is being amended to reflect a change in status of some of the prior cited co-owned applications. No new matter has been added.

New claims 5-9 have been added. Support for these new claims can be found, for example, in the cube corner array shown and described in connection with FIG. 9. Such support can likewise be found in parent application 08/887,074, filed July 2, 1997.

Claims 5-9 above are substantially copied from claims 1-5 respectively of U.S. Patent No. 6,015,214 (Heenan et al.) (copy attached), issued January 18, 2000, for the purposes of provoking an interference between the present application and the '214 Heenan patent. *See* 37 C.F.R. §§ 1.607 and 1.601(n). The correspondence between the pending claims and the claims of the '214 Heenan patent is as follows:

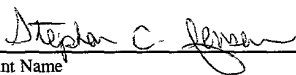
<u>Pending claim</u>	<u>'214 Heenan claim</u>
5	1
6	2
7	3
8	4
9	5

Applicants also present originally filed claims 1-4.

Applicants are claiming the same patentable invention as the claims of the '214 patent and an interference is therefore appropriate. By way of example, applicant's claim 7 is identical to claim 3 of the '214 Heenan patent and is necessarily directed to the same invention. *See* 37 C.F.R. §1.601(n). The undersigned plans to file a more detailed request for interference in accordance with 37 C.F.R. §1.607 in the near future.

A fee calculation sheet accompanies this amendment. If any additional fees are required, please charge such fees (or credit any overpayment) to Deposit Account No. 13-3723.

Respectfully submitted,

Registration Number 35,207	Telephone Number 651-736-3369	Signature 
Date Jan. 17, 2001		Print Name Stephen C. Jensen

3M Innovative Properties Company
Office of Intellectual Property Counsel
P.O. Box 33427
St. Paul, Minnesota 55133-3427
Facsimile: (651) 736-3833

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Gerald M. Benson

Group Art Unit:

Duplicate

Serial No.: Continuation of Serial No. 08/887,074
filed 07/02/97

Filed: Herewith

Examiner: --

For: RETROREFLECTIVE CUBE CORNER SHEETING MOLD AND METHOD FOR
MAKING THE SAME

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail Post Office to Addressee in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on:

Jan-17, 2001

Date

Stephen C. Jensen

Signature

Express Mail No.: EL597084509US

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Introduction

This application is a continuation of pending U.S. Application Serial No. 08/887,074, filed July 2, 1997.

Amendment

In the Specification

At page 10, please delete the portion beginning at line 19 with the words "Related applications ..." and continuing to the end of the paragraph at line 27, and substitute therefor:

--Related applications filed (or whose priority applications were filed) on the same date as the parent application hereof include: Cube Corner Sheeting Mold and Method of Making the Same (U.S. Application Serial No. 09/636,730); Cube Corner Sheeting Mold and Method of Making the Same (U.S. Application Serial No. 09/636,520); Retroreflective

Duplicate

Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 08/886,998, now U.S. Patent No. 5,981,032); Retroreflective Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 09/342,410, now U.S. Patent No. 6,120,881); Retroreflective Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 09/342,812, now U.S. Patent No. 6,114,009); Retroreflective Cube Corner Sheeting Mold and Sheeting Formed Therefrom (U.S. Application Serial No. 09/650,695); Retroreflective Cube Corner Sheeting, Molds Therefore, and Methods of Making the Same (U.S. Application Serial No. 09/656,671); Retroreflective Cube Corner Sheeting, Molds Therefore, and Methods of Making the Same (U.S. Application Serial No. 09/656,697); Tiled Retroreflective Sheeting Composed of Highly Canted Cube Corner Elements (U.S. Application Serial No. 08/887,389, now U.S. Patent No. 5,898,523); Dual Orientation Retroreflective Sheeting (U.S. Application Serial No. 08/887,006, now U.S. Patent No. 5,936,770).--

In the Claims

Please add the following new claims:

- 5. An article comprising an array of microcubes, such that for every plane in space there are two adjacent microcubes for which at the place of adjacency none of the face edges is parallel to that plane, and in which at least one microcube of said array is rectangular, said at least one microcube of said array being canted face-more-parallel.
6. The article of claim 5 in which at least one microcube of said array has a plane of symmetry in which lies the cube axis of said microcube, thereby increasing the entrance angularity of said array in a plane perpendicular to said plane of symmetry.
7. An article comprising an array of microcubes, such that for every plane in space there are two adjacent microcubes for which at the place of adjacency none of the face edges is parallel to that plane, in which at least one of said microcube shape is rectangular, and in which at least one face of said rectangular microcube is pentagonal.
8. An article comprising an array of microcubes in which every three by three subarray of microcubes is nonrutable, and in which at least one microcube in a said three by three subarray of microcubes is rectangular, said at least one microcube being canted face-more-parallel.

Duplicate

9. The article of claim 8 in which at least one microcube of said array has a plane of symmetry in which lies the cube axis with said microcube, thereby increasing the entrance angularity of said array in a plane perpendicular to said plane of symmetry.--

Remarks

Please enter the above amendments before substantive examination. The specification is being amended to reflect a change in status of some of the prior cited co-owned applications. No new matter has been added.

New claims 5-9 have been added. Support for these new claims can be found, for example, in the cube corner array shown and described in connection with FIG. 9. Such support can likewise be found in parent application 08/887,074, filed July 2, 1997.

Claims 5-9 above are substantially copied from claims 1-5 respectively of U.S. Patent No. 6,015,214 (Heenan et al.) (copy attached), issued January 18, 2000, for the purposes of provoking an interference between the present application and the '214 Heenan patent. See 37 C.F.R. §§ 1.607 and 1.601(n). The correspondence between the pending claims and the claims of the '214 Heenan patent is as follows:

<u>Pending claim</u>	<u>'214 Heenan claim</u>
5	1
6	2
7	3
8	4
9	5

Applicants also present originally filed claims 1-4.

Applicants are claiming the same patentable invention as the claims of the '214 patent and an interference is therefore appropriate. By way of example, applicant's claim 7 is identical to claim 3 of the '214 Heenan patent and is necessarily directed to the same invention. See 37 C.F.R. §1.601(n). The undersigned plans to file a more detailed request for interference in accordance with 37 C.F.R. §1.607 in the near future.

Duplicate

A fee calculation sheet accompanies this amendment. If any additional fees are required, please charge such fees (or credit any overpayment) to Deposit Account No. 13-3723.

Respectfully submitted,

Registration Number 35,207	Telephone Number 651-736-3369	Signature <i>Stephen C. Jensen</i>
Date Jan. 17, 2001		Print Name Stephen C. Jensen

3M Innovative Properties Company
Office of Intellectual Property Counsel
P.O. Box 33427
St. Paul, Minnesota 55133-3427
Facsimile: (651) 736-3833